

AMENDMENTS TO THE CLAIMS

Claims 1-56 (Canceled).

57. (Currently Amended) A transgenic mouse whose genome comprises a homozygous disruption in ~~an~~ the endogenous glucagon receptor gene, wherein ~~where the disruption is homozygous,~~ the transgenic mouse exhibits, relative to a wild-type mouse, a metabolic abnormality or a pancreatic abnormality.
58. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises a decreased fasting blood glucose level.
59. (Previously Added) The transgenic mouse of claim 58, wherein the metabolic abnormality comprises increased glucose tolerance.
60. (Previously Added) The transgenic mouse of claim 59, wherein the increased glucose tolerance is characterized by a decreased blood glucose level following glucose administration.
61. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises a decreased fasting insulin level.
62. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises an increased glucagon level.
63. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises decreased body weight.
64. (Previously Added) The transgenic mouse of claim 57, wherein the pancreatic abnormality is selected from the group consisting of pancreatic hyperplasia, pancreatic hypertrophy, increased cytoplasmic vacuolization of pancreatic cells, and increased cytoplasmic granularity of pancreatic cells.
65. (Previously Added) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises a pancreatic adenoma.
66. (Previously Added) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises an increase in number and size of pancreatic alpha cells.
67. (Previously Added) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises a decrease in number of pancreatic beta cells.

68. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality is selected from the group consisting of decreased body fat percentage, decreased body weight and decreased organ weight.
69. (Previously Added) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises decreased body size or dwarfism.
70. (Canceled)
71. (Previously Added) A cell obtained from the transgenic mouse of claim 57.